

**1 Identification**

- **Product identifier**
- **Trade name:** CERABIEN ZR : FC Paste Stain
- **Article number:** CA824-FCPS
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Dental porcelain
- **Details of the supplier of the safety data sheet**
- **Manufacturer:**  
Kuraray Noritake Dental Inc.  
300 Higashiyama, Miyoshi-cho,  
Miyoshi, Aichi, 470-0293  
Japan
- **Contact information:**  
Kuraray America, Inc.  
33 Maiden Lane, 6th Floor, New York,  
NY 10038 U.S.A.  
Tel: 800-879-1676  
Fax: 888-700-5200  
Website: www.kuraraydental.com
- **Emergency telephone number:**  
For chemical emergency spill, leak, fire, exposure or accident  
Call CHEMTREC day and night  
Within USA and Canada: 1-800-424-9300 CCN706984 or  
+1 703-527-3887 (collect calls accepted)

**2 Hazard(s) identification**

- **Classification of the substance or mixture**



GHS08 Health hazard

- |   |  |
|---|--|
| Germ Cell Mutagenicity - Category 2                             | H341 Suspected of causing genetic defects.                           |
| Carcinogenicity - Category 1A                                   | H350 May cause cancer.   |
| Reproductive Toxicity - Category 2                              | H361 Suspected of damaging fertility or the unborn child.            |
| Specific Target Organ Toxicity - Repeated Exposure - Category 1 | H372 Causes damage to organs through prolonged or repeated exposure. |



GHS07

- |                                    |   |
|------------------------------------|---|
| Acute Toxicity (Oral) - Category 4 | H302 Harmful if swallowed.                |
| Skin Irritation - Category 2       | H315 Causes skin irritation.              |
| Eye Irritation - Category 2A       | H319 Causes serious eye irritation.       |
| Skin Sensitizer - Category 1       | H317 May cause an allergic skin reaction. |

- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS07, GHS08
- **Signal word** Danger
- **Hazard-determining components of labeling:**  
vanadium pentoxide  
nickel oxide

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**Hazard statements**

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.

**Precautionary statements**

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P321 Specific treatment (see on this label).
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

**Results of PBT and vPvB assessment**

- PBT:** Not applicable.
- vPvB:** Not applicable.

**3 Composition/information on ingredients**

**Chemical characterization: Mixtures**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

1313-99-1	nickel oxide ⚠ Carcinogenicity - Category 1A, H350; Specific Target Organ Toxicity - Repeated Exposure - Category 1, H372; ⚠ Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1, H317; Aquatic Chronic 4, H413	≤1%
1314-62-1	vanadium pentoxide ⚠ Germ Cell Mutagenicity - Category 2, H341; Carcinogenicity - Category 2, H351; Reproductive Toxicity - Category 2, H361; Specific Target Organ Toxicity - Repeated Exposure - Category 1, H372; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Toxicity (Oral) - Category 4, H302; Acute Toxicity (Inhalation) - Category 4, H332; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	≤1%
56-81-5	glycerol	15-35%
107-88-0	1,3-Butanediol ⚠ Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319	5-15%

**Other ingredients:**

- Potassium alumino silicate glass
- Pigments

**4 First-aid measures**

**Description of first aid measures**

- After inhalation:** Supply fresh air; consult doctor in case of complaints.
- After skin contact:** Immediately wash with water and soap and rinse thoroughly.

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- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**5 Fire-fighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents:** Product is not flammable
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** See Section 8.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Ensure adequate ventilation.  
Use appropriate Personal Protective Equipment (PPE).
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Avoid contact with skin and eyes. Do not swallow. Avoid generating dust. Do not breathe dust/fume/gas/mist/vapors/spray.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store at room temperature.
- **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**56-81-5 glycerol**

EL (Canada)	Long-term value: 10* 3** mg/m <sup>3</sup> *mist; **mist, respirable
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EV (Canada)	Long-term value: 10 mg/m <sup>3</sup>
<b>1313-99-1 nickel oxide</b>	
EL (Canada)	Long-term value: 0.05 mg/m <sup>3</sup> as Ni; ACGIH A1, IARC 1
EV (Canada)	Long-term value: 0.2 mg/m <sup>3</sup> Inhalable fraction, as Ni
<b>1314-62-1 vanadium pentoxide</b>	
EL (Canada)	Long-term value: 0.05 mg/m <sup>3</sup> inhalable, IARC 2B
EV (Canada)	Long-term value: 0.05 mg/m <sup>3</sup> respirable dust and fume

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:** Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

**9 Physical and chemical properties**

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

<b>Form:</b>	Pasty
<b>Color:</b>	Colored
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined

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· pH-value:	Not determined
· Change in condition	
Melting point/Melting range:	18.18 °C (glycerol)
Boiling point/Boiling range:	290 °C (glycerol)
· Flash point:	177 °C (glycerol)
· Flammability (solid, gaseous):	Product is not flammable.
· Ignition temperature:	523 °C (glycerol)
· Decomposition temperature:	Not determined
· Auto igniting:	Not determined
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	0.9 Vol % (glycerol)
Upper:	Not determined
· Oxidizing properties	Not determined
· Vapor pressure:	0.1 hPa (20°C, glycerol)
· Density:	
Relative density	Not determined
Vapor density	Not determined
Evaporation rate	Not determined
· Solubility in / Miscibility with	
Water:	Partly miscible.
· Partition coefficient (n-octanol/water):	Not determined
· Viscosity:	Not determined
· Dynamic:	Not determined
· Kinematic:	Not determined
· Other information	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** None

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· <b>LD/LC50 values that are relevant for classification:</b>
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1314-62-1 vanadium pentoxide
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Oral	LD50	10 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Irritating effect
- **on the eye:** Causes serious eye irritation.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful  
Irritant

· <b>IARC (International Agency for Research on Cancer)</b>		
1313-99-1	nickel oxide	1
1314-62-1	vanadium pentoxide	2B
· <b>NTP (National Toxicology Program)</b>		
1313-99-1	nickel oxide	K

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:**  
Disposal must be made according to official regulations.  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

· <b>UN-Number</b>	
· <b>DOT, TDG, ADN, IMDG, IATA</b>	Void
· <b>UN proper shipping name</b>	
· <b>DOT, TDG, ADN, IMDG, IATA</b>	Void

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· <b>Transport hazard class(es)</b>	
· <b>DOT, TDG, ADN, IMDG, IATA</b>	
· <b>Class</b>	Void
· <b>Packing group</b>	
· <b>DOT, TDG, IMDG, IATA</b>	Void
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Void

**15 Regulatory information**

· **Section 355 (extremely hazardous substances):**

1314-62-1	vanadium pentoxide
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· **Section 313 (Specific toxic chemical listings):**

1313-99-1	nickel oxide
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1314-62-1	vanadium pentoxide
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· **SARA 311/312:** See Section 2 for the information on physical and health hazards.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

56-81-5	glycerol
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107-88-0	1,3-Butanediol
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1313-99-1	nickel oxide
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· **Canadian Ingredient Disclosure list (limit 0.1%)**

107-88-0	1,3-Butanediol
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1313-99-1	nickel oxide
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1314-62-1	vanadium pentoxide
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· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

Carcinogenic hazardous material group III (dangerous).

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **\* Data compared to the previous version altered.**